

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P238331

Luminaire Tested: **PRS630D010-S6M24-61SWWC**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-25)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS630D010-S6M24-61SWWC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2039.7 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 0.94 / 1.03
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

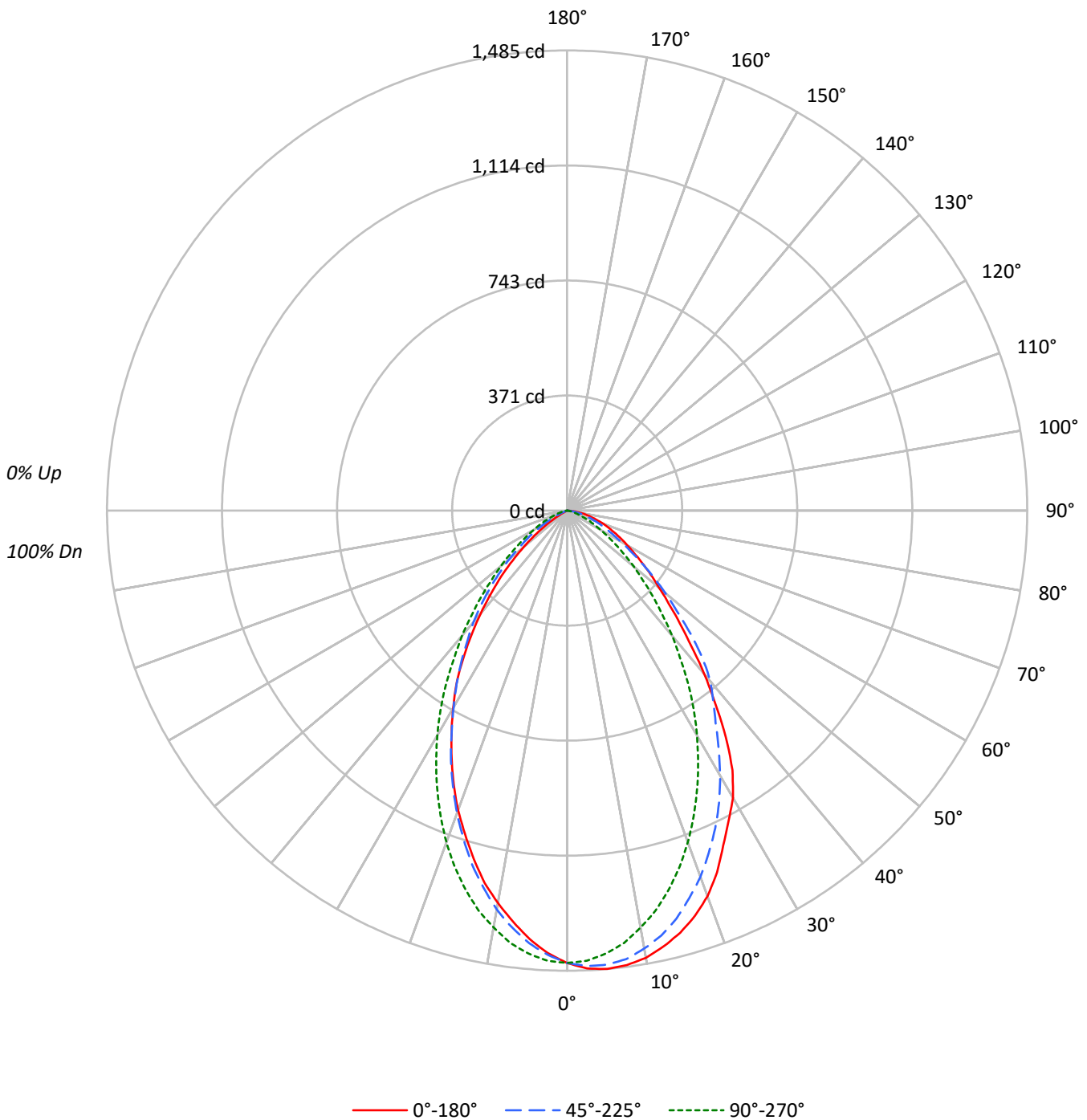
Input Watts (W): 25.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71					71			
4	91	81	74	69	89	80	73	68	78	72	67	75	71	67	73	69	66	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	60	58					58			
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52					52			
7	74	63	56	50	73	62	55	50	61	55	50	60	54	50	58	53	49	48					48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44					44			
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	62857	62857	62857
5°	64173	62021	59990
10°	64067	59717	56211
15°	62855	56449	51889
20°	60683	52197	47129
25°	56614	47155	41901
30°	53197	41652	36566
35°	46942	35752	30811
40°	38697	29682	24399
45°	31316	23741	18352
50°	25929	18708	12224
55°	22212	14322	6643
60°	19289	10712	1903
65°	17187	7885	0
70°	15660	5224	0
75°	13342	3227	0
80°	11654	2058	0
85°	8201	1383	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.0	6.6
10°-20°	356.7	17.5
20°-30°	463.4	22.7
30°-40°	445.4	21.8
40°-50°	327.8	16.1
50°-60°	188.2	9.2
60°-70°	85.3	4.2
70°-80°	31.8	1.6
80°-90°	6.1	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	955.2	46.8
0°-40°	1400.6	68.7
0°-60°	1916.6	94.0
0°-90°	2039.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2039.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1460	1460	1460	1460	1460	
5°	1485	1471	1435	1402	1388	141
15°	1410	1363	1266	1183	1164	396
25°	1192	1131	993	888	882	550
35°	893	835	680	594	586	553
45°	514	564	390	348	301	401
55°	296	290	191	155	88	267
65°	169	136	77	33	0	169
75°	80	55	19	0	0	87
85°	17	8	3	0	0	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9
2.5°	1479.3	1479.3	1479.3	1476.5	1476.5	1479.3	1476.5	1476.5	1473.7	1473.7	1471.0
5°	1484.8	1484.8	1484.8	1484.8	1482.0	1482.0	1482.0	1479.3	1476.5	1473.7	1471.0
7.5°	1479.3	1479.3	1479.3	1479.3	1476.5	1476.5	1473.7	1471.0	1468.2	1462.7	1459.9
10°	1465.4	1465.4	1465.4	1462.7	1459.9	1457.1	1457.1	1451.6	1446.1	1440.5	1435.0
12.5°	1440.5	1440.5	1437.8	1437.8	1432.3	1432.3	1429.5	1424.0	1418.4	1412.9	1404.6
15°	1410.1	1407.4	1407.4	1404.6	1399.1	1396.3	1393.5	1385.2	1377.0	1368.7	1363.1
17.5°	1371.4	1368.7	1365.9	1363.1	1354.8	1349.3	1346.5	1338.2	1329.9	1321.7	1310.6
20°	1324.4	1321.7	1318.9	1313.4	1307.8	1302.3	1296.8	1288.5	1277.4	1266.4	1258.1
22.5°	1263.6	1260.8	1258.1	1255.3	1247.0	1241.5	1238.7	1230.4	1219.4	1208.3	1194.5
25°	1191.7	1191.7	1194.5	1186.2	1180.6	1175.1	1175.1	1166.8	1155.8	1141.9	1130.9
27.5°	1128.1	1128.1	1122.6	1117.0	1108.8	1103.2	1100.5	1092.2	1086.6	1075.6	1061.7
30°	1070.0	1067.3	1061.7	1056.2	1047.9	1039.6	1031.3	1020.3	1009.2	998.2	987.1
32.5°	992.6	989.9	989.9	989.9	981.6	978.8	973.3	959.4	945.6	926.3	909.7
35°	893.1	890.3	887.6	890.3	895.8	898.6	901.4	895.8	882.0	859.9	835.0
37.5°	785.3	788.0	790.8	793.5	801.8	807.4	804.6	815.7	812.9	799.1	774.2
40°	688.5	688.5	691.2	699.5	707.8	710.6	713.4	724.4	724.4	727.2	718.9
42.5°	591.7	600.0	602.8	608.3	616.6	622.1	627.6	638.7	641.5	652.5	647.0
45°	514.3	519.8	525.3	530.9	539.2	544.7	547.5	555.8	564.1	569.6	564.1
47.5°	445.2	447.9	450.7	456.2	464.5	467.3	472.8	481.1	489.4	486.6	481.1
50°	387.1	389.9	389.9	398.2	403.7	406.5	406.5	417.5	417.5	417.5	412.0
52.5°	340.1	340.1	342.9	345.6	351.2	351.2	356.7	362.2	356.7	353.9	348.4
55°	295.9	295.9	298.6	301.4	301.4	304.1	306.9	306.9	301.4	295.9	290.3
57.5°	257.1	259.9	259.9	262.7	265.4	262.7	265.4	259.9	254.4	248.8	240.6
60°	224.0	226.7	226.7	229.5	229.5	229.5	226.7	221.2	212.9	207.4	199.1
62.5°	196.3	196.3	196.3	196.3	196.3	196.3	193.5	188.0	179.7	174.2	165.9
65°	168.7	168.7	168.7	168.7	165.9	165.9	163.1	157.6	149.3	143.8	135.5
67.5°	143.8	143.8	143.8	143.8	141.0	138.2	135.5	132.7	124.4	118.9	113.4
70°	124.4	121.7	121.7	118.9	116.1	113.4	113.4	107.8	102.3	96.8	91.2
72.5°	99.5	99.5	99.5	99.5	94.0	94.0	91.2	85.7	80.2	77.4	71.9
75°	80.2	80.2	80.2	77.4	74.7	74.7	71.9	69.1	63.6	60.8	55.3
77.5°	63.6	63.6	63.6	60.8	58.1	55.3	55.3	52.5	47.0	44.2	41.5
80°	47.0	47.0	44.2	41.5	41.5	38.7	38.7	35.9	33.2	30.4	27.6
82.5°	30.4	30.4	30.4	27.6	27.6	24.9	24.9	24.9	22.1	19.4	16.6
85°	16.6	16.6	16.6	13.8	13.8	13.8	13.8	13.8	11.1	11.1	8.3
87.5°	2.8	2.8	2.8	2.8	2.8	5.5	2.8	2.8	2.8	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9
2.5°	1471.0	1468.2	1465.4	1465.4	1462.7	1462.7	1459.9	1457.1	1454.4	1454.4	1451.6
5°	1468.2	1465.4	1459.9	1457.1	1454.4	1451.6	1448.8	1443.3	1440.5	1435.0	1432.3
7.5°	1454.4	1448.8	1443.3	1437.8	1435.0	1432.3	1424.0	1418.4	1412.9	1407.4	1401.8
10°	1429.5	1424.0	1415.7	1410.1	1404.6	1399.1	1393.5	1382.5	1374.2	1365.9	1357.6
12.5°	1396.3	1388.0	1379.7	1368.7	1365.9	1360.4	1352.1	1341.0	1332.7	1321.7	1310.6
15°	1354.8	1341.0	1335.5	1321.7	1316.1	1310.6	1302.3	1291.2	1280.2	1266.4	1255.3
17.5°	1299.5	1285.7	1280.2	1266.4	1260.8	1255.3	1241.5	1230.4	1219.4	1205.5	1191.7
20°	1244.2	1233.2	1219.4	1205.5	1200.0	1194.5	1177.9	1166.8	1155.8	1139.2	1128.1
22.5°	1180.6	1166.8	1153.0	1141.9	1133.6	1128.1	1114.3	1100.5	1083.9	1067.3	1053.5
25°	1117.0	1100.5	1086.6	1072.8	1061.7	1056.2	1039.6	1023.0	1006.4	992.6	976.0
27.5°	1045.2	1031.3	1014.7	995.4	987.1	978.8	962.2	942.9	929.0	915.2	898.6
30°	970.5	956.7	937.3	920.7	912.4	904.1	887.6	871.0	857.1	837.8	821.2
32.5°	895.8	882.0	865.4	848.8	843.3	832.3	812.9	799.1	779.7	760.4	746.5
35°	824.0	812.9	796.3	777.0	763.1	752.1	732.7	710.6	694.0	680.2	666.4
37.5°	757.6	741.0	718.9	694.0	680.2	669.1	644.2	627.6	613.8	597.2	591.7
40°	688.5	660.8	635.9	611.1	600.0	586.2	566.8	550.2	539.2	528.1	514.3
42.5°	622.1	586.2	558.5	536.4	522.6	514.3	492.2	481.1	467.3	453.5	447.9
45°	547.5	519.8	486.6	464.5	453.5	445.2	425.8	412.0	398.2	389.9	381.6
47.5°	472.8	450.7	420.3	395.4	387.1	378.8	365.0	348.4	337.3	329.0	320.7
50°	398.2	381.6	365.0	337.3	329.0	326.3	309.7	295.9	284.8	279.3	271.0
52.5°	337.3	323.5	306.9	287.6	279.3	271.0	259.9	246.1	240.6	232.3	226.7
55°	279.3	265.4	257.1	243.3	232.3	226.7	215.7	207.4	199.1	190.8	185.3
57.5°	229.5	221.2	212.9	201.8	196.3	190.8	179.7	171.4	163.1	154.8	149.3
60°	190.8	182.5	174.2	165.9	160.4	157.6	146.5	138.2	130.0	124.4	118.9
62.5°	157.6	152.1	143.8	135.5	130.0	127.2	118.9	110.6	102.3	99.5	94.0
65°	130.0	124.4	116.1	107.8	107.8	102.3	94.0	88.5	82.9	77.4	71.9
67.5°	107.8	99.5	94.0	88.5	82.9	80.2	74.7	69.1	63.6	58.1	55.3
70°	85.7	80.2	74.7	66.4	63.6	60.8	55.3	49.8	47.0	41.5	38.7
72.5°	66.4	60.8	55.3	49.8	47.0	44.2	41.5	35.9	33.2	30.4	27.6
75°	52.5	47.0	41.5	35.9	35.9	33.2	30.4	24.9	22.1	19.4	19.4
77.5°	35.9	33.2	30.4	24.9	24.9	22.1	19.4	16.6	16.6	13.8	11.1
80°	24.9	22.1	19.4	16.6	13.8	13.8	11.1	11.1	8.3	8.3	5.5
82.5°	16.6	13.8	11.1	8.3	8.3	8.3	5.5	5.5	5.5	2.8	2.8
85°	8.3	5.5	5.5	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
87.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9
2.5°	1448.8	1446.1	1443.3	1443.3	1443.3	1440.5	1437.8	1435.0	1435.0	1432.3	1432.3
5°	1426.7	1421.2	1418.4	1415.7	1415.7	1410.1	1407.4	1404.6	1401.8	1399.1	1396.3
7.5°	1393.5	1388.0	1382.5	1377.0	1377.0	1371.4	1365.9	1363.1	1357.6	1354.8	1352.1
10°	1352.1	1346.5	1338.2	1332.7	1327.2	1324.4	1316.1	1310.6	1307.8	1299.5	1296.8
12.5°	1299.5	1291.2	1282.9	1277.4	1274.7	1266.4	1258.1	1255.3	1247.0	1241.5	1238.7
15°	1244.2	1233.2	1222.1	1219.4	1213.8	1205.5	1197.2	1188.9	1183.4	1175.1	1175.1
17.5°	1180.6	1166.8	1158.5	1150.2	1147.5	1136.4	1125.3	1119.8	1111.5	1106.0	1103.2
20°	1111.5	1097.7	1086.6	1081.1	1072.8	1064.5	1053.5	1047.9	1039.6	1034.1	1031.3
22.5°	1036.9	1020.3	1009.2	1003.7	998.2	984.3	976.0	970.5	962.2	956.7	953.9
25°	959.4	948.4	934.6	926.3	920.7	906.9	898.6	893.1	887.6	882.0	879.3
27.5°	882.0	865.4	851.6	846.1	840.6	832.3	818.4	810.1	807.4	804.6	801.8
30°	804.6	790.8	777.0	768.7	760.4	752.1	743.8	735.5	732.7	727.2	721.7
32.5°	732.7	718.9	705.1	699.5	694.0	680.2	671.9	666.4	663.6	652.5	649.8
35°	658.1	647.0	638.7	633.2	630.4	619.4	613.8	600.0	594.5	588.9	586.2
37.5°	580.6	569.6	561.3	561.3	555.8	550.2	544.7	539.2	528.1	525.3	522.6
40°	506.0	497.7	492.2	486.6	486.6	483.9	478.3	478.3	470.0	464.5	456.2
42.5°	436.9	431.3	425.8	425.8	423.0	420.3	414.7	414.7	409.2	403.7	395.4
45°	373.3	365.0	362.2	362.2	359.4	356.7	353.9	353.9	348.4	342.9	337.3
47.5°	315.2	309.7	306.9	304.1	301.4	301.4	298.6	295.9	293.1	287.6	282.0
50°	265.4	259.9	257.1	254.4	254.4	251.6	248.8	243.3	243.3	235.0	229.5
52.5°	221.2	218.4	212.9	210.1	207.4	204.6	201.8	199.1	193.5	188.0	185.3
55°	179.7	174.2	171.4	168.7	165.9	163.1	160.4	157.6	154.8	146.5	141.0
57.5°	143.8	138.2	135.5	135.5	132.7	127.2	124.4	121.7	116.1	110.6	102.3
60°	113.4	110.6	105.1	105.1	102.3	96.8	94.0	88.5	82.9	74.7	69.1
62.5°	88.5	85.7	80.2	77.4	77.4	71.9	66.4	60.8	55.3	49.8	41.5
65°	66.4	63.6	60.8	58.1	55.3	49.8	44.2	38.7	33.2	24.9	16.6
67.5°	49.8	47.0	41.5	41.5	38.7	33.2	27.6	22.1	13.8	8.3	2.8
70°	35.9	33.2	27.6	24.9	24.9	19.4	13.8	8.3	0.0	0.0	0.0
72.5°	24.9	22.1	16.6	13.8	13.8	8.3	2.8	0.0	0.0	0.0	0.0
75°	16.6	13.8	8.3	8.3	5.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	8.3	5.5	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P238331

CATALOG NUMBER: PRS630D010-S6M24-61SWWC

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9	1459.9
2.5°	1432.3	1429.5	1429.5	1429.5	1426.7	1429.5	1429.5	1429.5
5°	1393.5	1393.5	1390.8	1390.8	1390.8	1388.0	1388.0	1388.0
7.5°	1346.5	1346.5	1343.8	1343.8	1343.8	1341.0	1338.2	1338.2
10°	1294.0	1294.0	1291.2	1291.2	1291.2	1288.5	1285.7	1285.7
12.5°	1233.2	1233.2	1233.2	1230.4	1230.4	1230.4	1227.6	1230.4
15°	1172.3	1169.6	1169.6	1166.8	1164.1	1164.1	1164.1	1164.1
17.5°	1100.5	1097.7	1097.7	1094.9	1097.7	1094.9	1094.9	1094.9
20°	1025.8	1025.8	1025.8	1025.8	1025.8	1025.8	1028.6	1028.6
22.5°	953.9	951.1	953.9	951.1	951.1	953.9	953.9	956.7
25°	879.3	876.5	876.5	879.3	879.3	879.3	882.0	882.0
27.5°	796.3	801.8	801.8	804.6	804.6	807.4	810.1	807.4
30°	724.4	724.4	724.4	727.2	730.0	732.7	735.5	735.5
32.5°	647.0	649.8	652.5	649.8	652.5	658.1	663.6	666.4
35°	583.4	577.9	575.1	575.1	577.9	580.6	583.4	586.2
37.5°	514.3	511.5	508.8	503.2	506.0	508.8	508.8	508.8
40°	450.7	445.2	442.4	439.6	436.9	434.1	434.1	434.1
42.5°	389.9	384.3	378.8	378.8	370.5	367.7	367.7	365.0
45°	331.8	326.3	320.7	320.7	312.4	304.1	301.4	301.4
47.5°	276.5	268.2	265.4	262.7	254.4	246.1	240.6	237.8
50°	224.0	215.7	212.9	210.1	201.8	190.8	185.3	182.5
52.5°	177.0	168.7	163.1	160.4	149.3	141.0	135.5	132.7
55°	132.7	127.2	121.7	118.9	107.8	96.8	88.5	88.5
57.5°	96.8	85.7	82.9	80.2	69.1	60.8	52.5	49.8
60°	63.6	52.5	49.8	47.0	35.9	27.6	24.9	22.1
62.5°	33.2	24.9	22.1	19.4	13.8	8.3	5.5	5.5
65°	11.1	2.8	2.8	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)